

Supporting Information

A one-for-all versatile tumor-targeted drug delivery system based on IR808-modified nanoparticles, its co-loading PTX and R848 and the extraordinary anti-tumor efficacy

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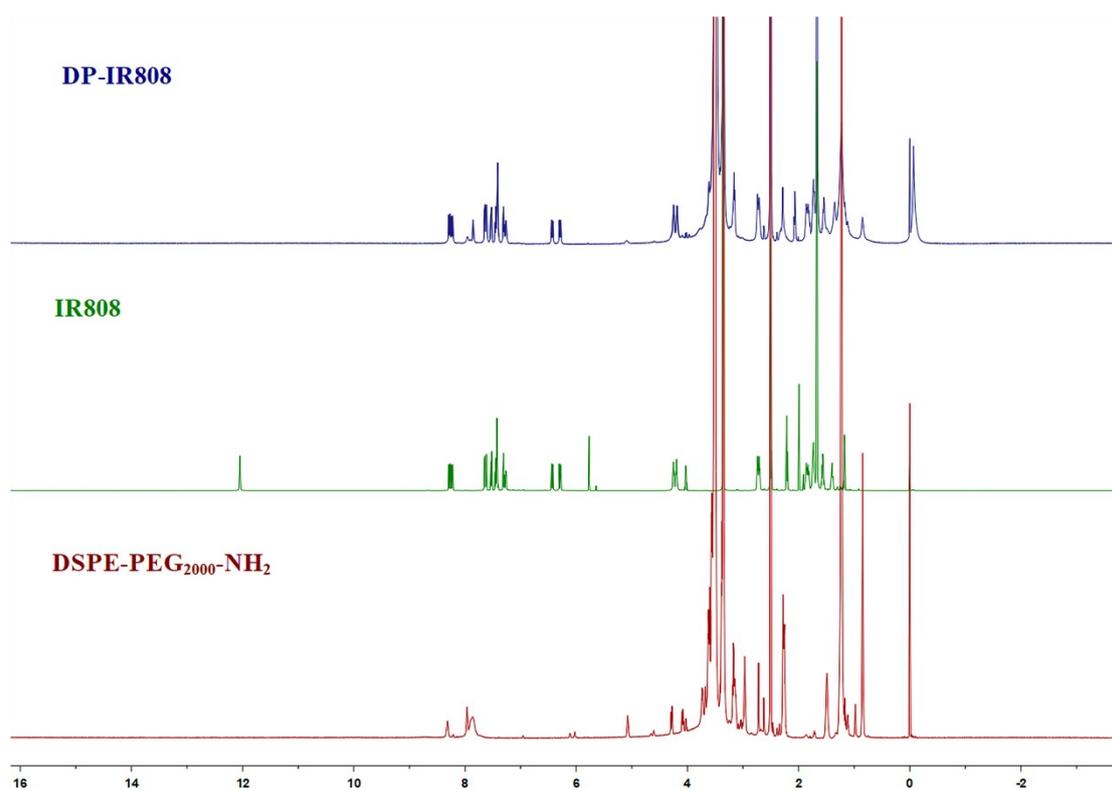


Fig. S1. ¹H NMR of the IR808, DSPE-PEG₂₀₀₀, DP-IR808

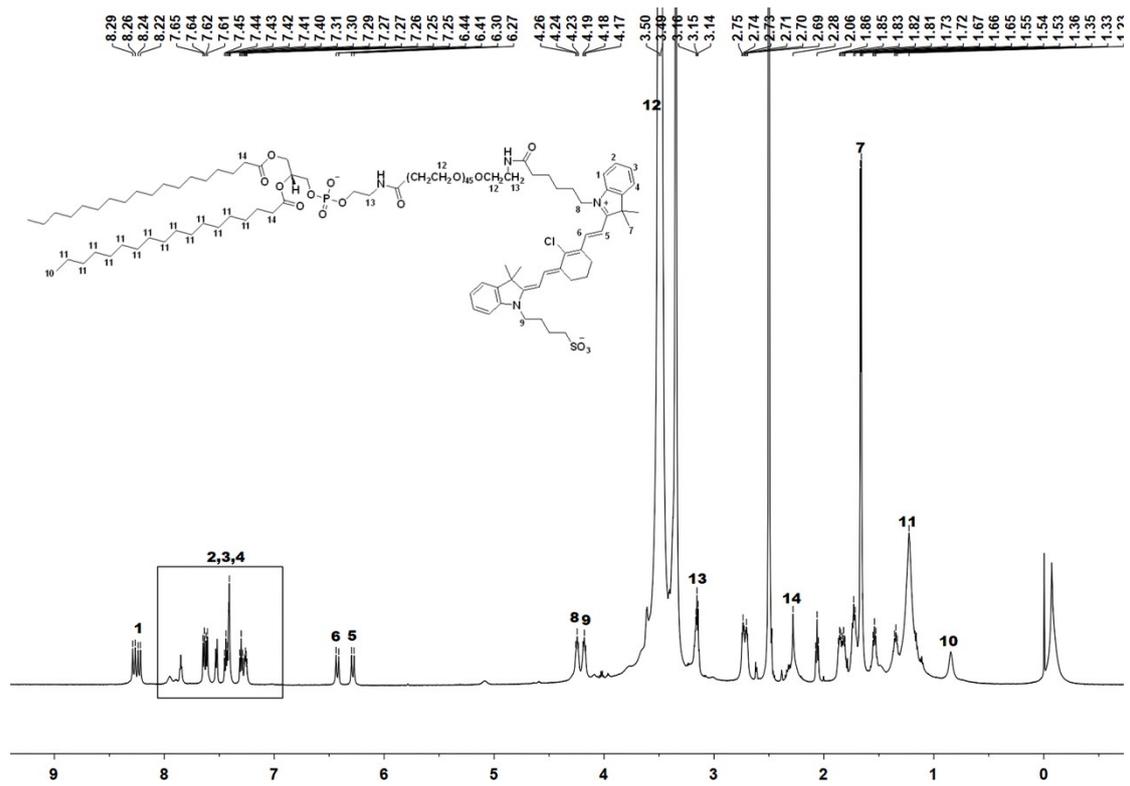


Fig. S2. ¹H NMR of the DP-IR808

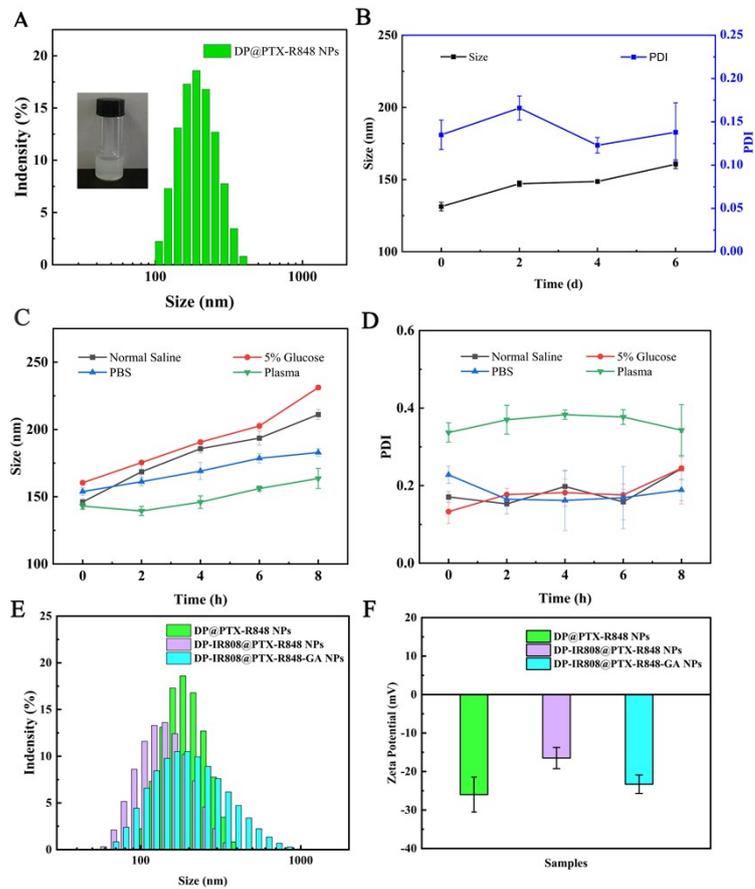


Fig. S3 The size distribution curve and the actual photo of DP@PTX-R848NPs (A); The particle size change and PDI change of DP@PTX-R848 NPs at 4°C for 6 d (B); The particle size change (C) and PDI change (D) of DP @PTX-R848 NPs when incubated in physiological media; Particle size distribution measured by DLS (E) and zeta potential (F) of DP@PTX-R848NPs, DP-IR808@PTX-R848NPs and DP-IR808@PTX-R848-GANPs.

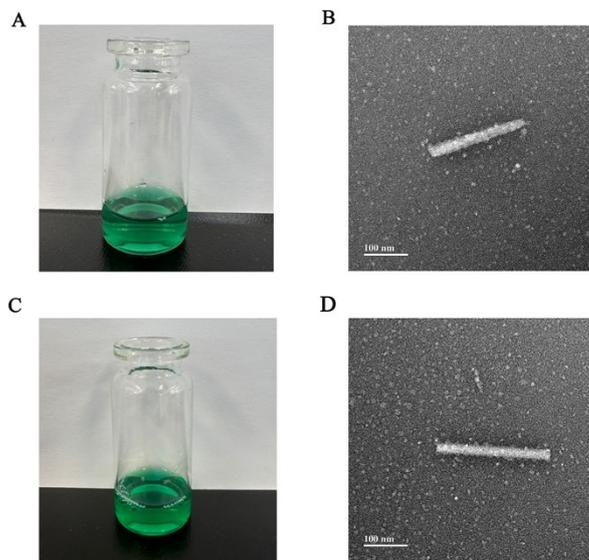


Fig. S4 The actual photo (A) and TEM images (scale bar: 100 nm) (B) of DP-IR808@PTX-R848 NPs; The actual photo (C) and TEM images (scale bar: 100 nm) (D) of DP-IR808@PTX-R848 NPs after 808 nm laser treatment at 1W/cm² for 5 min.

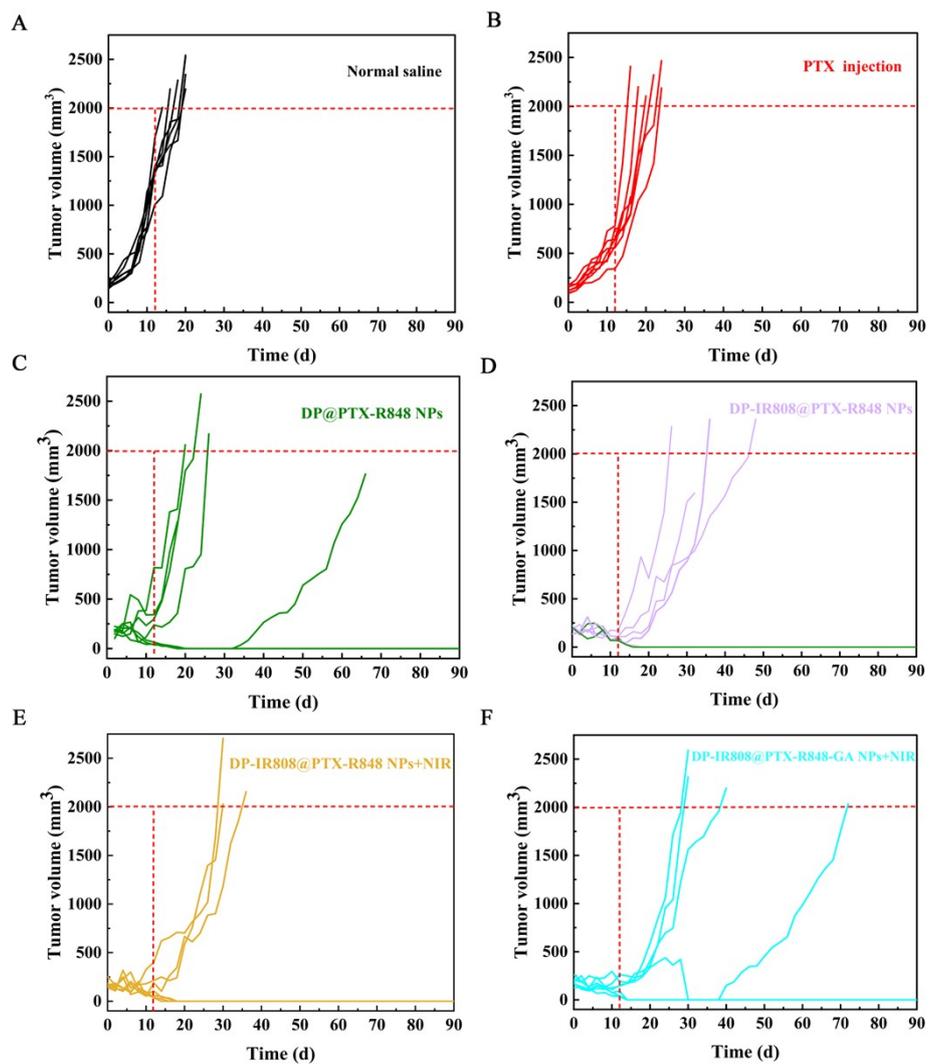


Fig. S5 The tumor volume change curve of mice in each group ($n = 7$).

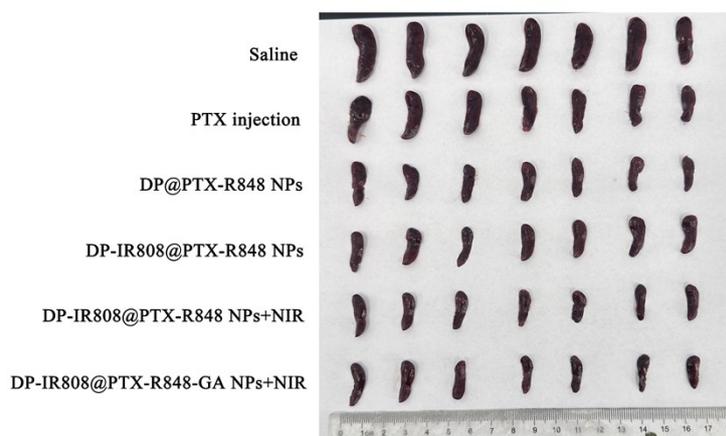


Fig. S6 Representative images of spleen tissues.

Table. S1. Average particle size, PDI and Zeta potential of three drug-carrying

nanoparticles.

	Size (nm)	PDI	Zeta(mV)
DP-IR808@PTX-R848 NPs	150.20 ± 1.89	0.10 ± 0.03	-(16.50 ± 2.77)
DP@PTX-R848 NPs	131.30 ± 2.98	0.14 ± 0.02	-(26.00 ± 4.55)
DP-IR808@PTX-R848-GA NPs	167.90 ± 11.08	0.20 ± 0.03	-(23.30 ± 2.40)

Table. S2. The median survival time and the tumor-free survival percentage of each group at the end of observation (on the 90th d)

	Median survival time (d)	Tumor-free survival percentage (%)
Saline	18	0
PTX injection	20	0
DP@PTX-R848 NPs	26	28.57
DP-IR808@PTX-R848 NPs	48	42.86
DP-IR808@PTX-R848-GA NPs + NIR	72	42.86
DP-IR808@PTX-R848 NPs + NIR	>90	57.14